changes in the nervous centres—be it hyperemia, anæmia, or real texture lesion not yet perhaps recognized. How to discriminate between these varied causes was difficult, but valuable indications were to be obtained from the general condition of the patient. Each case must be impartially judged on its own merits; and the eccentric irritation must be carefully sought for, and judiciously treated with special reference to the patient's general health.

GLOSSO-LABIO-LARYNGEAL PARALYSIS. Two cases of cure of this formidable disease have lately been reported, one in Vienna by Dr. Wilhelm, and one in England by Dr. Dowse, before the clinical society of London, (rep. in *Brit. Med. Jour.*, March 11). The patient was exhibited before the society and the following history given.

The patient's history was essentially neurotic. The mother, previously healthy, had died only a fortnight since from an attack of apoplexy, of twelve hours duration. The patient, when about twelve months old, suffered from convulsions, but grew out of them, went to school and was fairly intelligent. At the age of sixteen, he had a series of well-marked epileptic seizures of great severity, resulting in the paralysis of the whole body save those parts supplied by first, second, third, fourth and sixth nerves. The paralysis was complete of both motion and sensation. There was trismus of the jaw, from palsy of the pterygoids; also of the lips. He could neither bring them together nor perform the act of whistling. The saliva was constantly making its way from the mouth. The pillar of the soft fauces and palate were immovable. He was fed with fluids which often returned through the nostrils, and at times he was nearly asphyxiated by these passing into the larynx. Upon admission into the Central London Sick Asylum, at the age of twenty, most of the above signs and symptoms were well marked; but the paralysis of the upper extremities was gradually diminishing. He was of stunted growth and dark complexion, and was quite intelligent, though absolutely dumb, and had the greatest trouble in getting food into the pharynx. His best mode of procedure was that common in such cases—to fill the mouth, and with the fingers to push the food over the epiglottis into the bag of the pharynx. The tongue lay flaccid, wrinkled and immovable behind the lower row of teeth. Upon ophthalmoscope examination, the right eye showed cupping of the disk, with enlarged vessels. The left was similar, but the appearance less marked. The teeth were well defined, and gave no evidence of congenital syphilis. The vocal chords moved freely. The only sound he could make was a sort of grunt. The lower extremities were rigidly extended and absolutely devoid of both motion and sensation. The heels were well drawn up as in talipes-equino-valgus. Dr. Dowse then narrated the progressive return of voluntary power. So far as bulbar palsy was concerned, it first made itself evident in the motor division of the fifth by movement of the jaw; the lips could then be opproximated; the saliva ceased to flow from the mouth; he could feed himself with slowness and some difficulty, but the tongue remained immovable. He continued in this state for nearly twelve months neither improving nor retrograding.

He was taking cod-liver oil, quinine, and phosphorus. The paralysed parts were now brought under the influence of galvanism, and injec tions of 1-6 grain strychnia and 120 of a grain of atropia were daily used to the lower extremities. At first the induced current from a two celled Stohrer's battery was several times applied to the tongue without any results; after this, the continuous current from a six celled Stohrer's battery was applied, and with the best results for the tongue was quickly protruded, and as sharply retracted. For some days, he had, however, no voluntary power over it, but the use of daily galvanic stimulus shortly ensured this, and articulation soon became perfect. It was for some time almost inaudible, and the letter R was the most inarticulate of all the consonants. With this, the power of swallowing soon returned, so that he had complete co-ordinate voluntary power over those parts supplied by the bulbar nerves. The last to gain power and sensation were the lower limbs. The muscular atrophy here was so extreme, that nothing but the tibiae and integuments appeared left, but the galvanism, friction and injections gave the excellent result now seen. For instead of his being a mute, helpless and emaciated creature, he had complete voluntary power over every part of the body. In reference to the nature of the lesion in the medulla, Dr. Dowse thought that it existed within, rather than without this part of the cerebro-spinal system; it might, most probably, be due to venous extravasation during one of the severe epileptic seizures.

Dr. Hughlings Jackson thought the case of great value. He knew of none other which, with the same symptoms had recovered. He had tested the patient's palate which acted tolerably well. He thought Dr. Dowse was to be congratulated upon his good report of the case, and its good issue in his hands.

CONVULSIONS AND PARALYSIS DUE TO FRONTO-PARIETAL MENINGO-EN-CEPHALITIS. The following are the conclusions of a recent memoir by Dr. L. Landouzy, as given in the *Gaz. des Hopitaux*, No. 55.

For the theory of reflex excitation accepted generally by authors to account for the motor troubles from tuberculous meningitis, we think we are correct as regards the partial disorders of this kind at least, in substituting the theory of local excitation.

To the reflex excitations, or those at a distance we oppose:

1. Clinical experience; with its limited convulsions and paralysis, its dissociations symptomatiques infinitely varying (myoplegias, monoplegias, facial convulsions, rotation of the head, etc.), its habitual convulsive or paralytic hemiplegias, all symptomatic modalities which, escaping entirely from the action of the centres (ganglia, medulla, cord), can only be attributed to these dissociations anatomiques (motor points), the existence of which is affirmed by human pathology, in accord with experimental physiology.